



- 1 -

MADYN 2000, Error Report August 8th 2023

No.	Release	Error description	Workaround	Status
1	4.5 and before	Nonlinear transient analyses with SBS connection and a bearing at outer station of the connection: The force of the outer bearing was not calculated correctly	Mount the outer bearing to a station close to the SBS connection.	Fixed in version 4.5.21
1	4.5 and before	The following chain of connection can either lead to wrong results or to a crash: GSP connection with a station that is the outer node of an SBS connection	The GSP connection has to be applied at another station of the outer shaft.	Fixed in version 4.5.17
2	4.5 and before	In case of several FDC with different offsets: The offset of 1 st FDC is applied to all FDCs.		Fixed in version 4.5.9
3	4.4 and before	FDC coefficients for negative rotation are not added correctly to system matrices. The signs of the cross-coupling coefficients must change, which is not done automatically.	Export the coefficients, change the sign of the cross-coupling coefficient manually and reimport them.	Fixed in version 4.5.7
4	4.4.13-16	In case a prestressed shaft is connected with a GSP to another shaft containing inf for some coordinates, the stiffening effect of the prestress is wrong.	Use high stiffness values instead of inf.	Fixed in version 4.5.0
5	All versions	In transient analyses the direction of rotation for an unbalance excitation remains positive in case of a shaft with neg. rotation.		Fixed in 4.4.9
6	All Versions	Hot spot stability analysis (Morton effect) for fluid film bearings including thermoelastic deformation: The deformation is combined in a wrong way with the clearance.	Hot spot stability analysis can be done without consideration of the thermoelastic deformation and adapting the clearance to the deformed bearing.	Fixed in version 4.4.5



- 2 -

7	All versions	REB used as shaft in shaft connection: In case the outer shaft has high rotational deflections, the calculated REB moments are not correct.		Fixed in version 4.4.4
8	4.3 and before	TRA result deletion with linear bearings: Results of transient analysis were not deleted in case of bearing changes.		Fixed in version 4.3.13
9	4.3.6 and before	In the newly introduced feature to consider the thermal deformation in the floating ring bearings the nonlinear bearing and squeeze film damper forces are not looked up correctly. The error is rather small except for the case of reference temperatures considerably below the inlet temperature.		Fixed in version 4.3.7
10	4.3.3 and before	For the special case, that a DBS is used with an SFD <u>and</u> RSB the eigenvalue analysis is not running correctly.	Use a RSB or a RFB with imported data combining the properties of the SFD and the RSB.	Fixed in version 4.3.4 or 4.3.5